



Arlington Historic District Commissions

Application for Certificate

(Read attached instructions
before completing form)

For Commission Use Only:

Date Rec: _____

Hearing Date: _____

Certificate #: _____

Monitor: _____

Certificate Requested:

x **Appropriateness** – for work described herein

x Minor project Major Project Demolition

Non-Applicability – for the following reason(s):

Not subject to public view

Maintenance, repair, or replacement using same design and materials

Proposed change specifically excluded from review under Bylaw

Other: _____

Hardship – financial or otherwise and does not conflict substantially with
the intent and purposes of the Bylaw

General Information:

Property Address 50 Pleasant St District Pleasant Street

Owner(s) Town of Arlington Email _____

Owner's Phone (h) _____ (w) _____ (fax) _____

Owner's Address 730 Massachusetts Avenue, Arlington MA 02476

Applicant (if not Owner) Talia Fox

Applicant's Phone (h) 781-316-3428 (w) _____ (fax) _____

Applicant's Address 730 Massachusetts Avenue, Arlington MA 02476

Applicant's Relationship to Owner Sustainability Manager

Contractor Commonwealth Electrical Technologies / McGill Mechanical Phone 774-366-5327

Architect _____ Phone _____

Dates of Anticipated Work: Start 1/29/2024 Completion 2/9/2024

Description of Proposed Work: (attach additional pages as necessary) Please include a description of how the proposed work (if a change or addition) is historically and architecturally compatible with the building and the District as a whole.

Installation of new heat pump system to replace existing steam boiler and add air conditioning to the building.

Three condensers will be located out of public sight on the right side of the house, behind a portion of the structure.

Refrigerant line sets will be run up the sides of the building near the gutters, partially visible to the public. They will be encased in white slim duct to blend in as much as possible with the exterior.

Required Documentation Acknowledgement: (see attached instructions)

☒ I acknowledge that I am required to provide supporting documentation, including the attached "Supporting Documents Checklist", by the deadlines indicated in the instructions. I understand that if such documents are not provided in a timely manner, this application will be considered to be incomplete and Commission action may be delayed.

I have read the attached instructions and, to the best of my knowledge, the information contained in this application is accurate and complete. I also give permission for members of the AHDC to access the property for the purpose of reviewing this application and work done under any certificate issued to me.

Owners Signature(s): Robert Behrent Date: 12/19/2023

Application Information and Instructions

REVIEW DESIGN GUIDELINES AND CONTACT THE COMMISSION BEFORE YOU BEGIN ANY EXTERIOR WORK WITHIN AN HISTORIC DISTRICT: Property owners in an Historic District are required to obtain a certificate from the Commission prior to starting any exterior work on buildings or structures. Applicants are encouraged to review the Commissions' Design Guidelines (available at the Commission website) prior to filing an application. Once an application is received, a formal public hearing will be scheduled to consider the application, public notice will be published, and abutters and interested parties will be notified. Please note that, by Town Bylaw, the building department cannot issue a building permit for exterior work or demolition without the necessary certificate from this Commission. Anyone contemplating exterior work should contact the Commission's Executive Secretary. Property owners are encouraged to present preliminary plans to individual Commissioners or at informal Commission hearings to better understand Commission requirements.

Types of Certificates:

Certificate of Appropriateness – Required for exterior alterations and new construction that are subject to public view unless specifically exempted by the Bylaw.

Minor Projects: doors, windows, skylights, lighting fixtures, walls, fences, HVAC and electrical equipment, gutters, and other small additions or modifications.

Major Projects: new structures, additions, projections, solar panels, and significant modifications to exterior elevations or roofs.

Demolition Projects: removal of any existing structure or portion thereof in a Historic District.

Certificate of Non-Applicability – Issued for matters that are specifically excluded from AHDC review.

Certificate of Hardship – Issued when the denial of a Certificate would constitute a hardship, financial or otherwise, on the property owner and if the proposed work does not conflict substantially with the intent and purposes of the Bylaw. Approval of a Certificate of Hardship requires detailed documentation of specific hardship to an individual property owner.

Required Documentation: At a minimum, an application for a Certificate of Appropriateness or Hardship requires the documentation specifically listed on the attached "Supporting Documentation Checklist". A Certificate of Non-Applicability requires documentation of existing conditions and proposed changes. The Commission requires one set of the documentation (preferably electronic) by the deadlines described below and seven printed sets at the hearing (3 printed sets for minor projects). A copy of the signed checklist, with the appropriate boxes checked off, must be submitted with the documentation. An application will be deemed incomplete until the required documentation has been received and reviewed by the Commission. In an emergency, required documentation can be presented at the formal hearing, however, this may delay action on the application. Based on the complexity or unique nature of a particular project, the Commission may, as allowed by law, require additional information. Failure to provide sufficient documentation could delay approval or be cause for a negative determination.

Application Deadlines: The Commission typically meets on the fourth Thursday of each month (third Thursday in November and December) at the Whittemore-Robbins House, 670R Massachusetts Avenue (behind the Robbins Library). To allow for the publishing of legally required notices prior to individual hearings, Applications must be received approximately four weeks prior to the Commission hearing date. Specific deadlines for each hearing can be obtained from the Commission's Executive Secretary. All required documentation must be provided to the Commission for its review by the following deadlines:

Minor Projects: 7 calendar days prior to scheduled hearing

Major Projects or Demolition: 14 calendar days prior to scheduled hearing

In most cases, failure to meet these deadlines will delay scheduling of a formal hearing until the following month. Upon approval of an application at a formal hearing, a certificate will be issued approximately one week from the date of the hearing and a copy will be sent to the Building Inspector to allow issuance of a permit.

Contact Information: Additional information is available at: arlingtonhistoricdistrict.com. Inquiries, applications, and supporting documentation should be directed to Carol Greeley, Executive Secretary, ahdc@town.arlington.ma.us, (781) 316-3265. Any additional questions can be addressed to the Commissions' Chair Stephen Makowka at ahdcchair@town.arlington.ma.us. CONFIRM RECEIPT FOR ALL COMMUNICATIONS TO THE AHDC.

ARLINGTON HISTORIC DISTRICT APPLICATION Supporting Documentation Checklist

Property Address _____ District _____
Applicant's Name _____ Email _____
Applicant's Phone (Day) _____ (Mobile) _____

☐ **For Minor Projects or Certificate of Non-Applicability**

☐ **Drawings (11x17 max., with graphic scale, dimensioned, all materials identified) or marked up Photographs (8x10)**

Existing conditions of historic façade(s) to be modified; Show location of proposed work; Show proposed feature(s); Elevations showing proposed work and context; Drawing showing location of proposed work; Drawing showing the proposed feature(s); Site plan for site located equipment and features

☐ **Manufacturer's literature and specifications sheets describing the proposed feature(s)**

☐ **Description of how the proposed work is either compatible with the District or Non-Applicable**

☐ **For Major Projects**

☐ **Photographs (8x10)**

Existing conditions of historic structure to be modified (facades, roofs, neighboring buildings); Site; Neighborhood context; Historic precedents for proposed work

☐ **Drawings (11x17 max., with graphic scale, must show differentiated existing and proposed conditions, dimensions, and all materials identified)**

○ *Plans*

Site (showing proposed structures, fences, walls, parking, HVAC equipment, electrical equipment, and relationship to adjacent roads, neighboring buildings); Each floor; Roof (showing valleys, hips, ridges, dormers, skylights, chimneys, vents, HVAC equipment, solar panels)

○ *Elevations of building facades- identify:*

Foundation; Siding ; Trim; Gutters; Downspouts; Shutters; Railings; Stairs; Windows; Doors; Roof materials; Roof pitch; Chimneys and vents; Masonry; Light fixtures; Solar panels; HVAC equipment; Electrical equipment; Fences; Signage

○ *Wall sections (especially showing projecting features such as bays, balconies, porches, additions)*

○ *Relevant exterior detail drawings (architectural trim, eaves, doors, windows, caps, columns, vents, rail systems)*

○ *Profile drawings (window and door elements, railings, balusters, stairs, shutters, roof trim, corner boards, casings, water tables, skirts, frieze boards, and all other trim)*

○ *For projections, additions and new construction also include:*

Neighborhood lot plan- include footprint to lot area ratio as well as that of neighboring lots; Plot plan- existing building(s), setbacks, proposed new structures; Site section (show relationship to site topography, adjacent structures, major landscape features, roads)

☐ **Manufacturers' literature and specification sheets describing the proposed components**

☐ **Suggested Supporting Submittals: Model; Physical Samples**

☐ **Description of how the proposed work is compatible with the District.**

☐ **For Demolition**

☐ **Statement of current state of existing structure and reason for demolition**

☐ **Statement of the historic significance of the structure**

☐ **Site Documentation (including Plot plan; Photographs of existing conditions; List existing materials; Year built; Original architect)**

☐ **Other provided documentation not described above (please list on a separate attached sheet).**

Applicants Signature(s): _____ Date: _____

ARLINGTON HISTORIC DISTRICT APPLICATION

Supporting Documentation Checklist

Property Address 50 Pleasant St District Pleasant St
Applicant's Name Rob Behrent / Talia Fox Email rbehrent@town.arlington.ma.us / tfox@town.arlington.ma.us
Applicant's Phone (Day) 781-316-3110 / 781-316-3428 (Mobile) _____

☒ **For Minor Projects or Certificate of Non-Applicability**

☒ **Drawings (11x17 max., with graphic scale, dimensioned, all materials identified) or marked up Photographs (8x10)**

Existing conditions of historic façade(s) to be modified; Show location of proposed work; Show proposed feature(s); Elevations showing proposed work and context; Drawing showing location of proposed work; Drawing showing the proposed feature(s); Site plan for site located equipment and features

☒ **Manufacturer's literature and specifications sheets describing the proposed feature(s)**

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Applicants Signature(s): Robert Behrent Date: _____

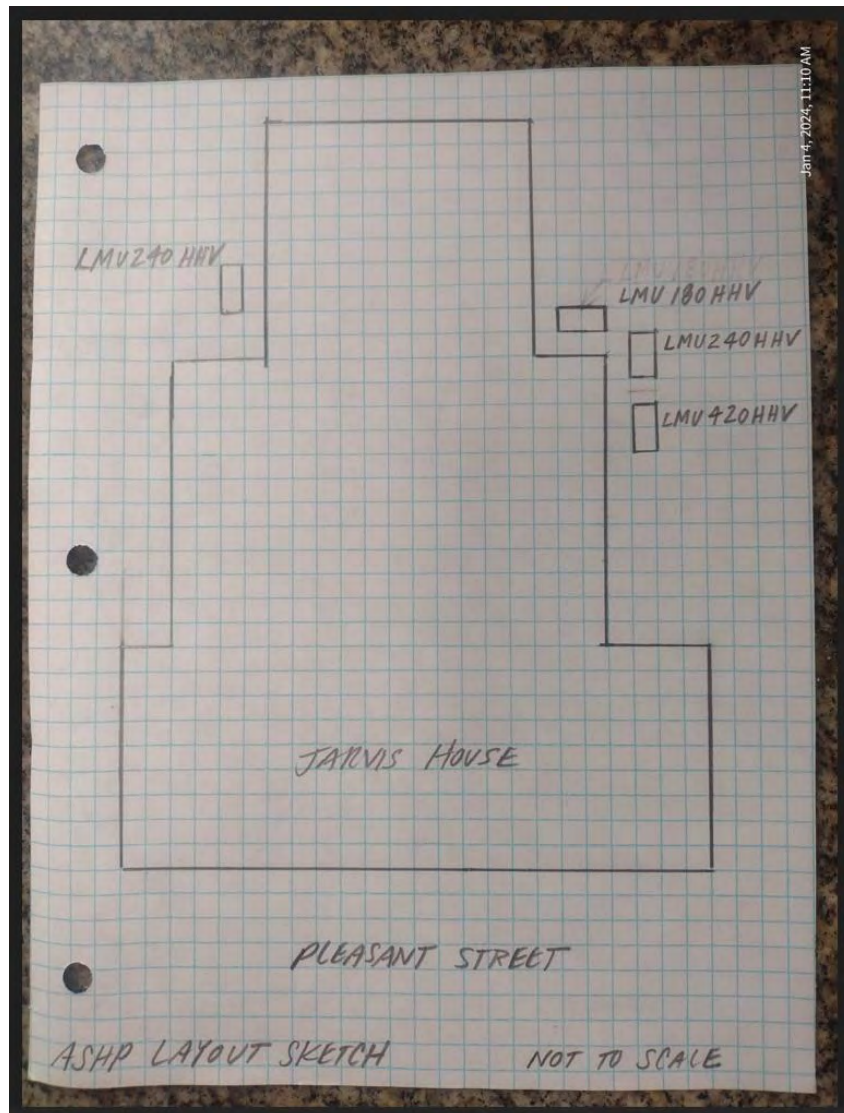
Jarvis House
50 Pleasant Street
Arlington, MA

Air Source Heat Pump System

Outdoor Equipment Locations for Historic Districts Commission Review



Project Description: The installation of an Air Source Heat Pump (ASHP) system has been proposed for the Jarvis House. This proposed, Minor Project is compatible with the Pleasant Street Historic District in the following ways: No outdoor units will be visible from Pleasant Street. No outdoor units will be installed on or around the front of the main structure closest to Pleasant Street. The quantity of outdoor units has been consolidated to a total of four (4). The outdoor units will be installed adjacent to the rear secondary structures and will be hidden from view from Pleasant Street by the corners of the building. Lines will not be installed on the front of the main structure visible from Pleasant Street. Lines on the main structure will be minimized to just one vertical line. It will be located adjacent to the existing electrical service on the right gable of the main structure. External lines along the rear secondary structures will be run low and parallel with the existing clap board. All external lines will be covered with paintable line-hide.



The outdoor units will be installed adjacent to the rear secondary structures and will be hidden from view from Pleasant Street by the corners of the building. The units will be installed on ground mounted stands to prevent vibration and to minimize altering siding. External lines will be installed and covered with paintable line-hide along the rear secondary structures. See attached cutsheets for line-hide specifications.

A total of four (4) outdoor units are proposed as located in sketch on page 2. See attached cutsheets for specifications.



Qty (1) 18,000 BTU LMU180HHV



Qty (2) 24,000 BTU LMU240HHV



Qty (1) 42,000 BTU LMU420HHV



External lines on main front structure have been minimized to just one vertical line. It will be located adjacent to the existing electrical service on the right gable of the main structure. This line is required to serve the second floor. This line and all lines will be covered with paintable line-hide. External lines will be installed and covered with paintable line-hide along the rear secondary structures. See attached cutsheets for specs for line-hide.



Three (3) outdoor units will be installed within this area.



One (1) outdoor unit will be installed within this area.

Arlington Historic Districts Commission Submittal

Job Name/Location:

10 for AHDC 1-25-24

Tag #:

Date:

PO No.:

For: ☐ File ☐ Resubmit☐ Approval ☐ Other

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

LMU180HHV

Multi F with LGRED Heat Pump Outdoor Unit

**Performance:**

Cooling (Min-Rated-Max, Btu/h)	8,400 ~ 18,000 ~ 19,980
Heating (Min-Rated-Max, Btu/h)	10,248 ~ 22,000 ~ 24,000
Cooling Power Input (Min-Rated-Max, kW)	0.88 ~ 1.33 ~ 1.87
Heating Power Input (Min-Rated-Max, kW)	1.25 ~ 2.22 ~ 3.11

Cooling Nominal Test Conditions:

Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB/75°F WB

Heating Nominal Test Conditions:

Indoor: 70°F DB/60°F WB
Outdoor: 47°F DB/43°F WB**Electrical:**

Power Supply (V ¹ /Hz/Ø)	208-230/60/1
MOP (A)	30
MCA (A)	18.6
Recommended Fuse Size (A)	25
Cooling Rated Amps (A)	15.33
Heating Rated Amps (A)	15.33
Compressor (A)	13
Fan Motor (A)	0.73

MOP - Maximum Overcurrent Protection MCA - Minimum Circuit Ampacity

Piping:

Refrigerant Charge (lbs.)	6.18
Liquid Line (in, OD)	Ø1/4 x 2
Vapor Line (in, OD)	Ø3/8 x 2
Max Total Piping ² (ft)	164
Max ODU to IDU Piping (ft)	82
Piping Length (no add'l refrigerant, ft)	49.2
Max Elevation between ODU and IDU (ft)	49.2
Max Elevation between IDU and IDU (ft)	24.6

ODU - Outdoor Unit IDU - Indoor Unit

Controls Features:

- Auto operation
- Auto restart opera. on
- Defrost/Deicing
- Inverter (variable speed compressor)
- Low ambient operation to 14F (cooling mode)
- Restart delay (3-minutes)
- Self diagnosis
- Soft start
- Factory installed Drain Pan Heater

Optional Accessories:

- ☐ PI-485 Integration Board - PMNFP14A1
- ☐ AC Smart IV - PACS4B000
- ☐ ACP IV - PACP4B000
- ☐ Power Distribution Indicator - PQNUD1S41
- ☐ MultiSITE™ CRC1 - PREMTBVC0
- ☐ MultiSITE CRC1+ - PREMTBVC1
- ☐ MultiSITE CM - PBACNBTR0A
- ☐ LonWorks® Gateway - PLNWKB100
- ☐ AC Smart IV BACnet® Gateway - PBACNA000
- ☐ ACP IV BACnet Gateway - PQNFB17C2
- ☐ Low Ambient Wind Baffle (Cooling operation to -4°F) - ZLABGP04A

For a complete list of available accessories, contact your LG representative.

For continual product development, LG reserves the right to change specifications without notice.

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Operating Range:

Cooling (°F DB)	14 to 118
Heating (°F WB)	-13 to +75

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure ³ (Cool/Heat) ±3 dB(A)	50 / 54
Net Unit Weight (lbs)	147.7
Shipping Weight (lbs)	163.1
Heat Exchanger Coating	GoldFin™
Min Number of Indoor Units	2
Max Number of Indoor Units	2

Compressor:

Quantity	1
Type	Twin Rotary
Oil/Type	FVC68D

Fan:

Type	Propeller
Quantity	1
Fan Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate (CFM)	2295

Notes:

- Acceptable operating voltage: 187V - 253V.
- Piping lengths are equivalent.
- Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- All power/communication cable to be minimum 18 American wire gage (AWG), 4-conductor, stranded, shielded or unshielded wire and must comply with applicable local and national code. If shielded, the wire must be grounded to the chassis at the outdoor unit only.
- Power wiring cable size must comply with the applicable local and national code.
- This data is rated 0 ft above sea level, with 25 ft of refrigerant line and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 - 105%.
- Must follow installation instructions in the applicable LG installation manual.
- Refer to the Engineering Manual for combination capacity tables.
- See Engineering Manual for sensible and latent capacities.
- See Engineering Manual Capacity Tables for ODU capacity at design condition.



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LMU180HHV

Multi F with LGRED Heat Pump Outdoor Unit



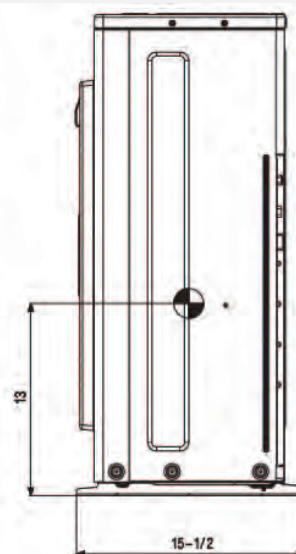
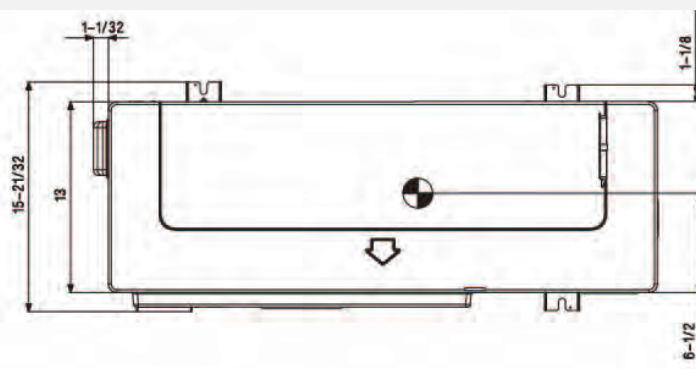
LG

Life's Good

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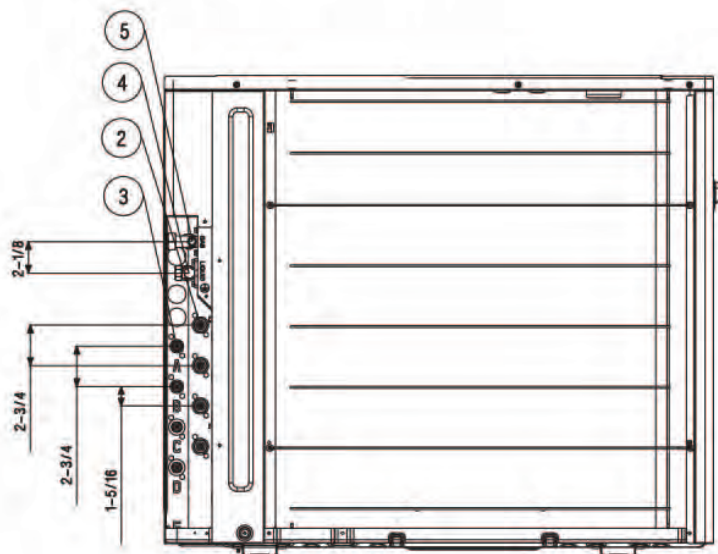
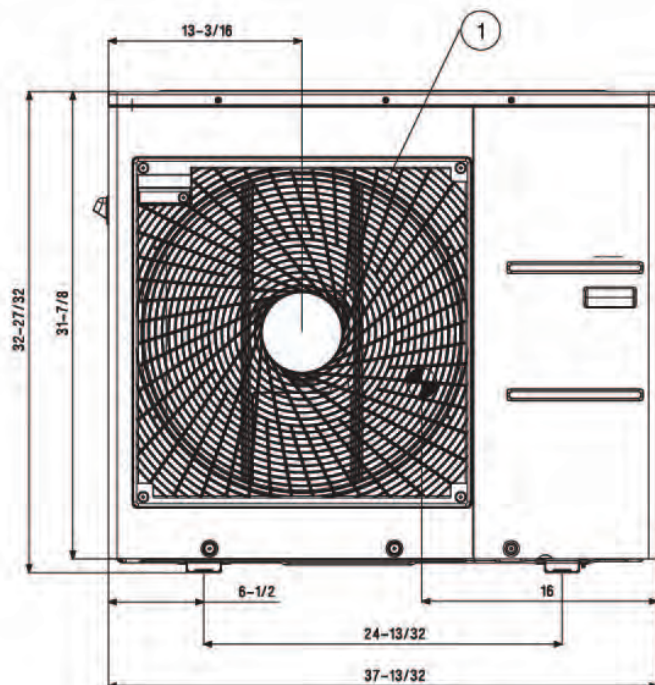
Date:

PO No.:



Unit: Inch

● Gravity point



No.	Part Name
1	Air discharge grille
2	Gas pipe connection
3	Liquid pipe connection
4	Main service valve (Liquid)
5	Main service valve (Gas)

Job Name/Location:

12for AHDC 1-25-24

Tag #:

Date:

PO No.:

For: ☐ File ☐ Resubmit☐ Approval ☐ Other

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

LMU240HHV

Multi F with LGRED Heat Pump Outdoor Unit

**Performance:**

Cooling (Min-Rated-Max, Btu/h)	8,400 ~ 24,000 ~ 30,000
Heating (Min-Rated-Max, Btu/h)	10,248 ~ 26,000 ~ 31,200
Cooling Power Input (Min-Rated-Max, kW)	0.94 ~ 1.78 ~ 2.49
Heating Power Input (Min-Rated-Max, kW)	1.26 ~ 2.12 ~ 2.96

Cooling Nominal Test Conditions:

Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB/75°F WB

Heating Nominal Test Conditions:

Indoor: 70°F DB/60°F WB
Outdoor: 47°F DB/43°F WB**Electrical:**

Power Supply (V ¹ /Hz/Ø)	208-230/60/1
MOP (A)	30
MCA (A)	19
Recommended Fuse Size (A)	25
Cooling Rated Amps (A)	15.73
Heating Rated Amps (A)	15.73
Compressor (A)	13
Fan Motor (A)	0.73

MOP - Maximum Overcurrent Protection MCA - Minimum Circuit Ampacity

Piping:

Refrigerant Charge (lbs.)	7.05
Liquid Line (in, OD)	Ø1/4 x 3
Vapor Line (in, OD)	Ø3/8 x 3
Max Total Piping ² (ft)	246.1
Max ODU to IDU Piping (ft)	82
Piping Length (no add'l refrigerant, ft)	73.8
Max Elevation between ODU and IDU (ft)	49.2
Max Elevation between IDU and IDU (ft)	24.6

ODU - Outdoor Unit IDU - Indoor Unit

Controls Features:

- Auto operation
- Auto restart opera. on
- Defrost/Deicing
- Inverter (variable speed compressor)
- Low ambient operation to 14F (cooling mode)
- Restart delay (3-minutes)
- Self diagnosis
- Soft start
- Factory installed Drain Pan Heater

Optional Accessories:

- ☐ PI-485 Integration Board - PMNFP14A1
- ☐ AC Smart IV - PACS4B000
- ☐ ACP IV - PACP4B000
- ☐ Power Distribution Indicator - PQNUD1S41
- ☐ MultiSITE™ CRC1 - PREMTBVC0
- ☐ MultiSITE CRC1+ - PREMTBVC1
- ☐ MultiSITE CM - PBACNBTR0A
- ☐ LonWorks® Gateway - PLNWKB100
- ☐ AC Smart IV BACnet® Gateway - PBACNA000
- ☐ ACP IV BACnet Gateway - PQNFB17C2
- ☐ Low Ambient Wind Baffle (Cooling operation to -4°F) - ZLABGP04A

For a complete list of available accessories, contact your LG representative.

For continual product development, LG reserves the right to change specifications without notice.

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Operating Range:

Cooling (°F DB)	14 to 118
Heating (°F WB)	-13 to +75

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure ³ (Cool/Heat) ±3 dB(A)	52 / 55
Net Unit Weight (lbs)	152.1
Shipping Weight (lbs)	165.3
Heat Exchanger Coating	GoldFin™
Min Number of Indoor Units	2
Max Number of Indoor Units	3

Compressor:

Quantity	1
Type	Twin Rotary
Oil/Type	FVC68D

Fan:

Type	Propeller
Quantity	1
Fan Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate (CFM)	2295

Notes:

- Acceptable operating voltage: 187V - 253V.
- Piping lengths are equivalent.
- Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- All power/communication cable to be minimum 18 American wire gage (AWG), 4-conductor, stranded, shielded or unshielded wire and must comply with applicable local and national code. If shielded, the wire must be grounded to the chassis at the outdoor unit only.
- Power wiring cable size must comply with the applicable local and national code.
- This data is rated 0 ft above sea level, with 25 ft of refrigerant line and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 - 105%.
- Must follow installation instructions in the applicable LG installation manual.
- Refer to the Engineering Manual for combination capacity tables.
- See Engineering Manual for sensible and latent capacities.
- See Engineering Manual Capacity Tables for ODU capacity at design condition.



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LMU240HHV

Multi F with LGRED Heat Pump Outdoor Unit



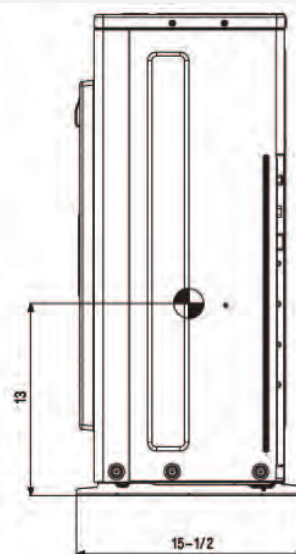
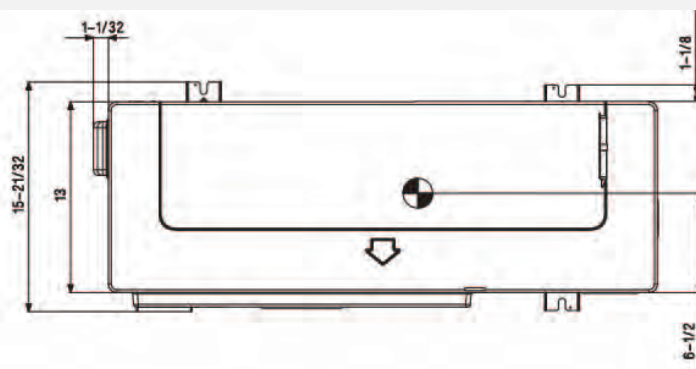
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Life's Good

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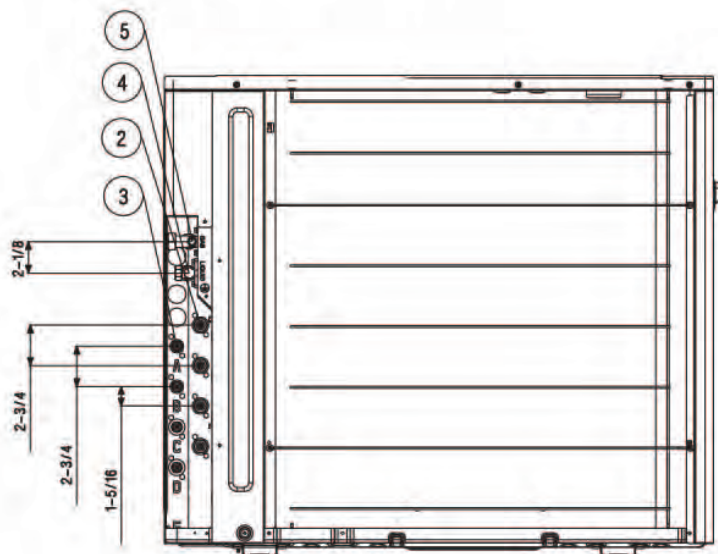
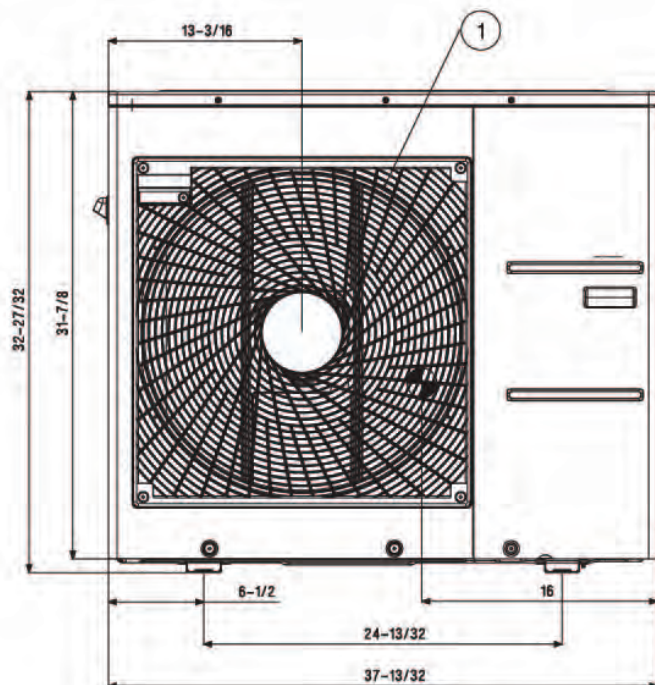
Date:

PO No.:



Unit: Inch

Gravity point



No.	Part Name
1	Air discharge grille
2	Gas pipe connection
3	Liquid pipe connection
4	Main service valve (Liquid)
5	Main service valve (Gas)

Date:	For: File	Resubmit
PO No.:	Approval	Other
Architect:	GC:	
Engr:	Mech:	
Rep:		
(Company)	(Project Manager)	

LV420HHV

Single Zone LGRED° Vertical Air Handler Unit

Outdoor Unit (ODU) - LUU420HHV Indoor Unit (IDU) - LVN420HV

Performance:

Cooling:

Cooling Capacity (Min~Rated~Max, Btu/h)	16,800 ~ 42,000 ~ 50,000
SEER / EER	19.6 / 12.5

SEER - Seasonal Energy Efficiency Ratio

EER - Energy Efficiency Ratio

Heating:

Heating Capacity (Min~Rated~Max, Btu/h)	18,000 ~ 48,000 ~ 60,000
HSPF	11.0
Max heating @ Indoor 700DB (Btu/h)	
Outdoor 17°F WB	52,200
Outdoor 50°F WB	48,000
Outdoor -40°F WB	38,200
Outdoor -130°F WB	28,810

HSPF - Heating Seasonal Performance Factor

Cooling Nominal Test Conditions:

Indoor: 80°F DB / 67°F WB

Outdoor: 95°F DB / 75°F WB

Heating Nominal Test Conditions:

Indoor: 70°F DB / 60°F WB

Outdoor: 47°F DB / 43°F WB

Electrical:

Power Supply ¹ (V/Hz/Ø)	208-230 / 60 / 1
MOP / MCA (A)	40 / 32
Cooling / Heating Rated Amps (A)	14.9 / 16.4
Compressor(A)	22.0
Fan Motor (IDU + ODU) (A)	1.3 + (1.6 x 2)
Cooling Power Input (Min~Rated~Max, kW)	1.19 ~ 3.36 ~ 5.32
Heating Power Input (Min~Rated~Max, kW)	1.34 ~ 3.69 ~ 5.8
Locked Rotor Amps (A)	33

MOP - Maximum Overcurrent Protection

MCA - Minimum Circuit Ampacity

Piping:

Installed Liquid Pipe (in., O.D.)	3/8 Flare
Installed Vapor Pipe (in., O.D.)	5/8 Flare
IDU Liquid Connection (in., O.D.)	3/8 Flare
IDU Vapor Connection (in., O.D.)	5/8 Flare
Additional Refrigerant (oz./ft.)	0.43
Min/Max. Pipe Length (ft.)	16.4 / 246
Piping Length (no add'l refriger., ft.)	24.9
Max. Elevation (ft.)	98.4

Features:

- Hot start
- Inverter (variable speed)
- Auto restart
- Control lock
- W2 terminal connection
- Group control
- Timer (on/off)
- Sleep Mode
- Optional Wi-Fi Control
- Built in dry contact
- ODU Drain Pan Heater
- Night Quiet Function
- IDU compatible with Multi F (18k, 24k, 36k models)

Required Accessories (sold separately):

Controller (Any LG wired remote controller)

Optional Accessories:

- ☐ MultiSITE™ CRC1 - PREMTBVCO
- ☐ MultiSITE CRC1+ - PREMTBVC1
- ☐ MultiSITE Comm. Mgr. - PBACNBTR0A
- ☐ AC Smart 5 - PACS5A000
- ☐ ACP 5 - PACPSA000
- ☐ Simple Controller - PREMTCC00U
- ☐ Wi-Fi module - PWFMDD200
- ☐ Remote Temperature Sensor - ZRTBS01
- ☐ Aux Heater Relay Kit - PRARH1
- ☐ Dry Contact - PDRYCB320
- ☐ Low Ambient Wind Baffle (cooling operation to -4°F) - ZLABGP04A⁹
- ☐ Electric Heater 3kW - ANEH033B1¹³
- ☐ Downflow Conversion Kit - PNDFK0

For a complete list of available accessories, contact your LG representative.

For continual product development, LG reserves the right to change specifications without notice.

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Operating Range:

Outdoor Unit:

Cooling (°F DB)	5 to 118
Heating (°F WB)	-13 to 64

Indoor Unit:

Cooling (°F WB)	57 to 77
Heating (°F DB)	59 to 81

System Data:

Refrigerant Type/Control	R410A / EEV
Refrigerant Charge (lbs.)	9.26
ODU Sound Pressure Max (Cool / Heat) ±1 dB(A) ³	54 / 56
IDU Sound Pressure (H/M/L) ±1 dB(A) ³	48 / 45 / 44
ODU Net / Shipping Weight (lbs.)	210.9 / 234.1
IDU Net / Shipping Weight (lbs.)	158.7 / 176.4

Fan:

ODU / IDU Fan Type	Propeller / Sirocco
Fan Speeds (Fan/Cool/Heat)	3 / 3 / 3
Fan Quantity (ODU + IDU)	2 + 1
Motor/Drive	Brushless Digitally Controlled / Direct
Maximum ODU Air Volume (CFM)	4,238
IDU Air Volume (H/M/L) (CFM)	1,260 / 1,100 / 1,000
Dehumidification Rate (pts/hr) ¹⁰	6.76
IDU External Static Pressure Operating Range (Min~Default~Max) (in-wg) ¹¹	0.1~ 0.3 ~ 1.0

Notes:

1. Acceptable operating voltage: 187V-253V.
2. Piping lengths are equivalent.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. All power/communication cable to be minimum 14 American wire gage (AWG), 4-conductor, stranded, shielded or unshielded wire and must comply with applicable local and national code. If shielded, the wire must be grounded to the chassis at the outdoor unit only.
5. Power wiring cable size must comply with the applicable local and national code.
6. The indoor unit comes with a dry helium charge.
7. This data is rated 0 ft. above sea level, with 25 ft. of refrigerant line and a 0 ft. level difference between outdoor and indoor units.
8. Must follow installation instructions in the applicable LG installation manual.
9. If the optional low ambient wind baffle (ZLABGP04A) is used, one wind baffle is required for each ODU fan.
10. Dehumidification rate is based on high speed airflow.
11. 18k, 24k, and 36k IDU units have ECM fan that automatically adjusts throughout the ESP (External Static Pressure) range. Therefore, there is no default ESP value for these units.
12. 18k and 24k VAHUs are supplied with socket adapters for pipe transitions.
13. Electric heater accessory available in 3kW, 5kW, 8kW, 10kW, 15kW, and 20kW capacities. Refer to the engineering manual for details.
14. Controller not included.

LGRED°
Powerful Heat Technology

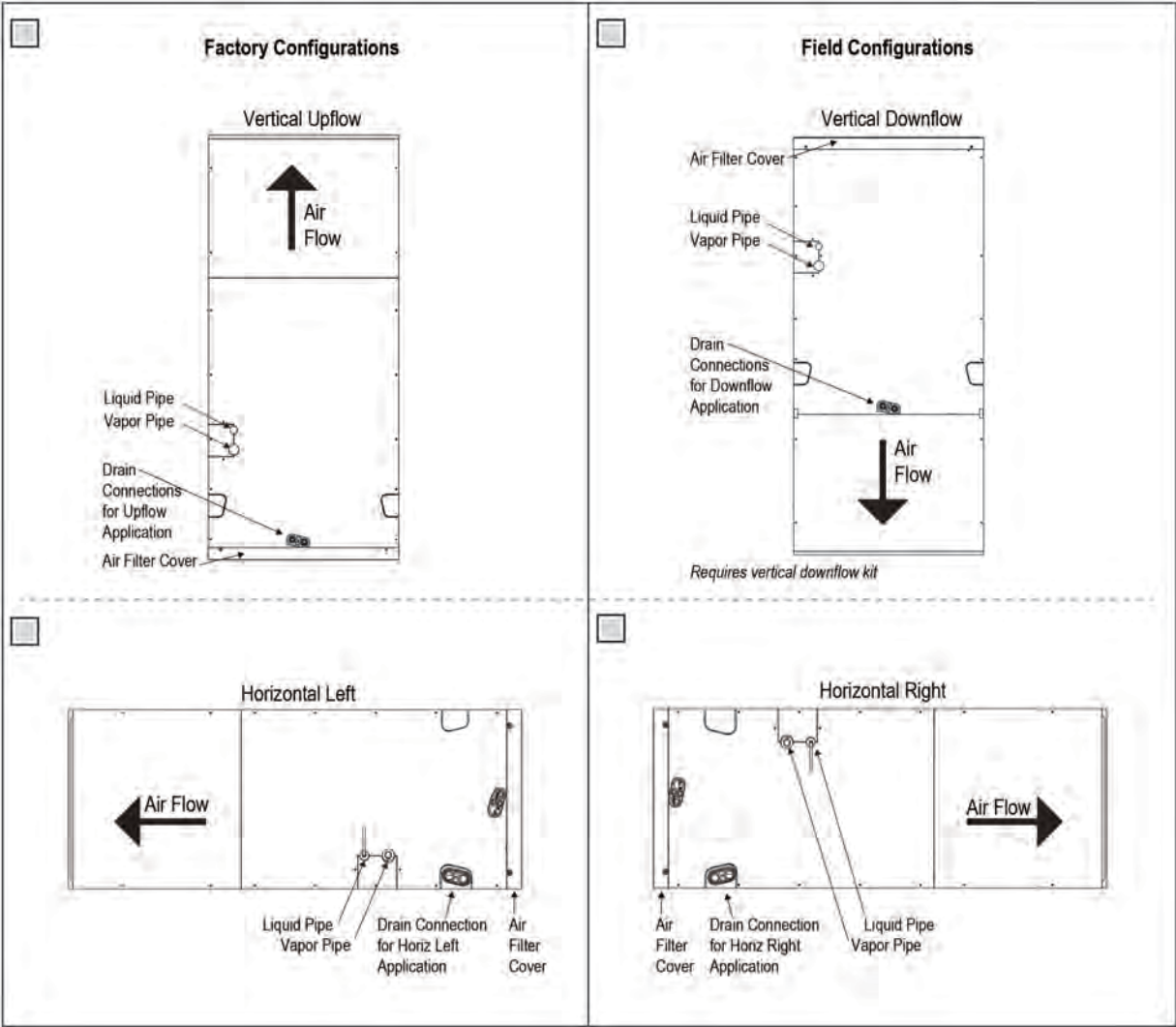
Inverter



LVN420HV
Single Zone LGRED° Vertical Air Handler Unit



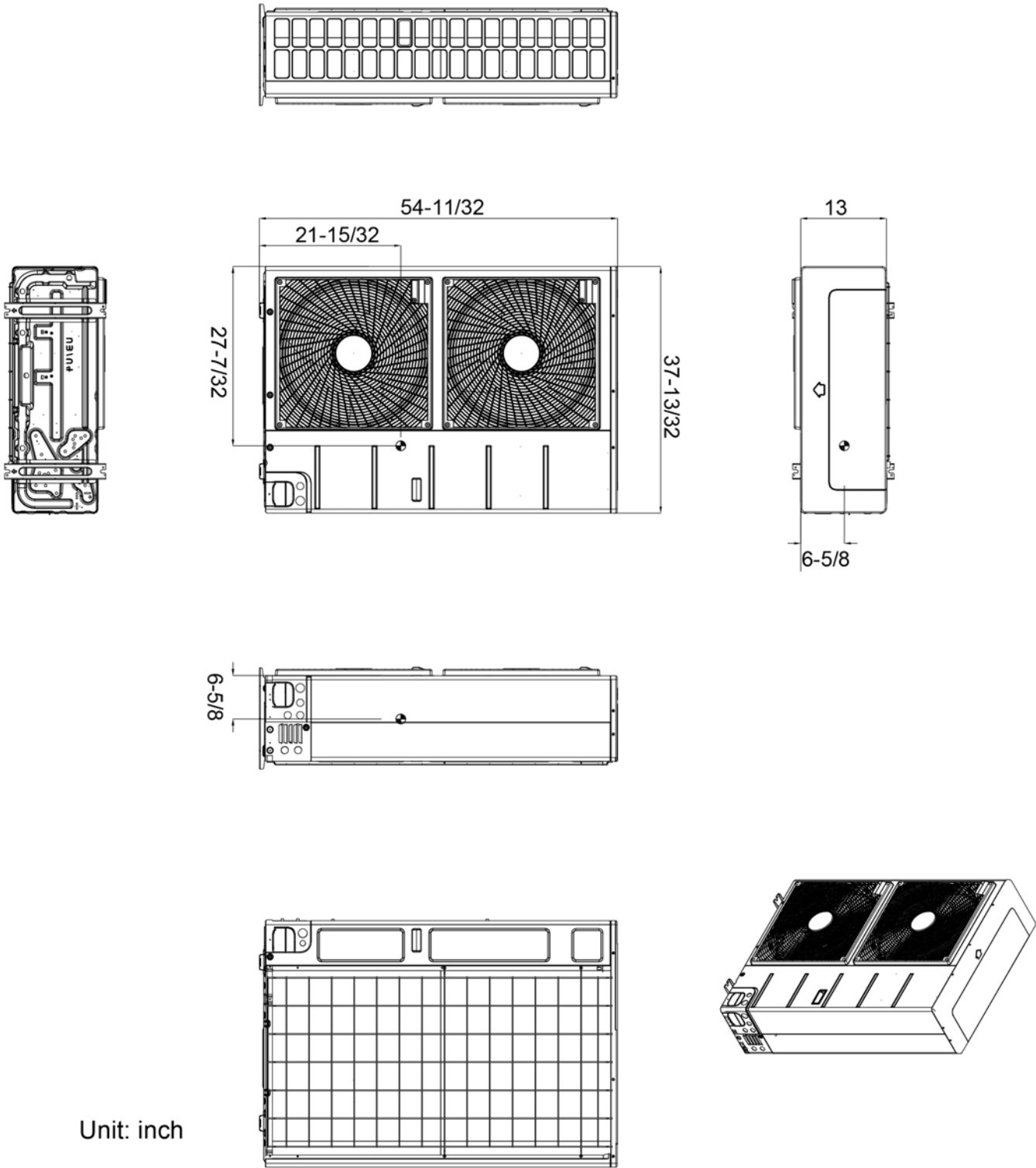
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Date: _____
PO No.: _____



LUU420HHV
Single Zone LGRED° Vertical Air Handler Unit



Tag No.: _____
Date: _____
PO No.: _____



Unit: inch

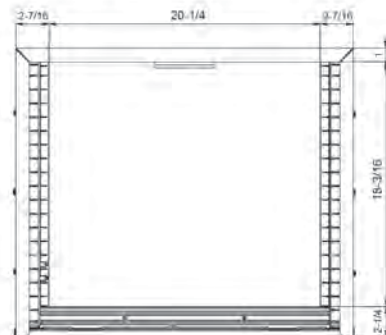
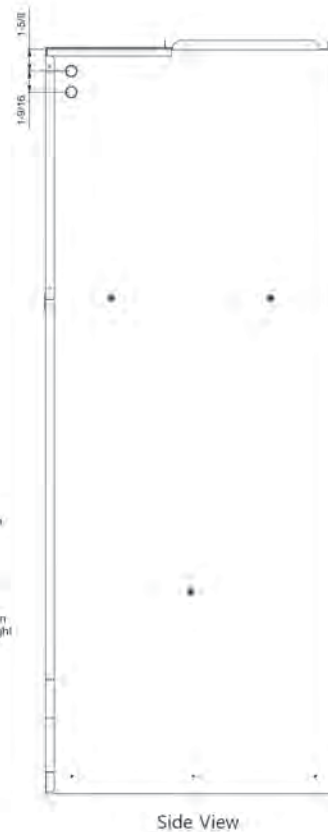
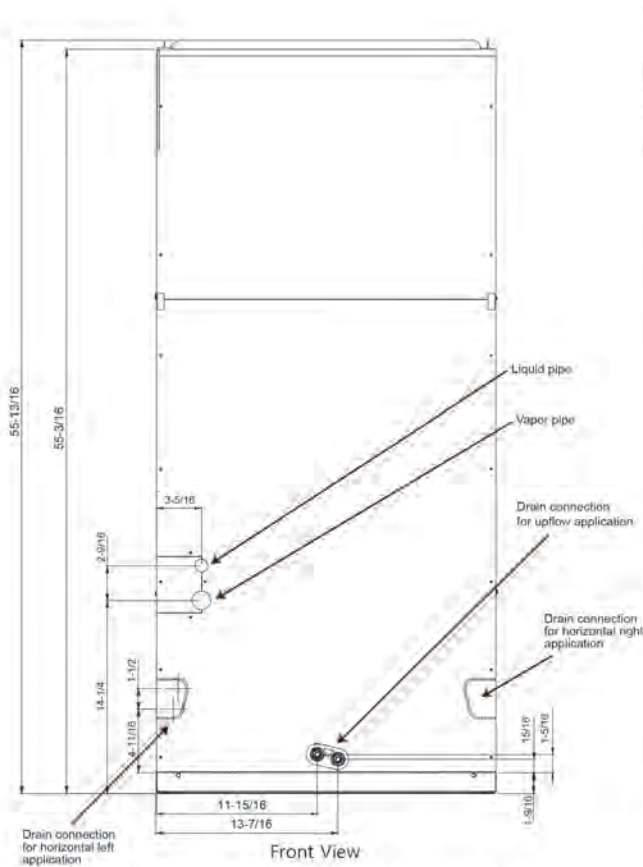
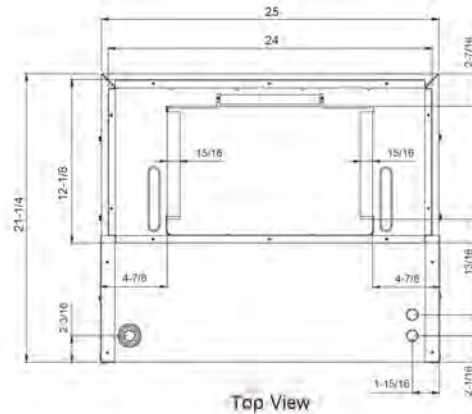
LVN420HV
Single Zone LGRED° Vertical Air Handler Unit



Tag No.: _____

Date: _____

PO No.: _____



Unit: inch



Fortress[®]

Lineset duct and fittings.

Professional protection for A/C systems.

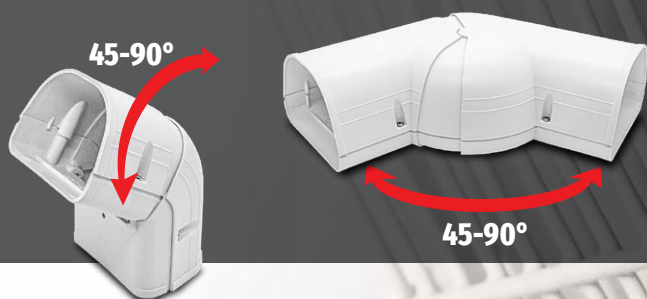
Complete System.

Covers and fittings for the majority of applications

- **Satin finish**
- **Heavy duty grade.** For mini-splits, high velocity and conventional ducted AC systems.
- **Snap together design** for quick installation
- **UV and weather resistant**
- **Stylish.** Compliments any residential or commercial building.
- **2 sizes, 4 color options**
- **7.5' duct lengths.** 6 lengths per box

Adjustable Fittings Now Available!

Comes in 3.5" & 4" Sizes, adjusts within 45-90° Angles

















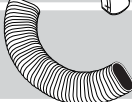



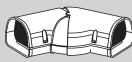


19for AHDC 1-25-24

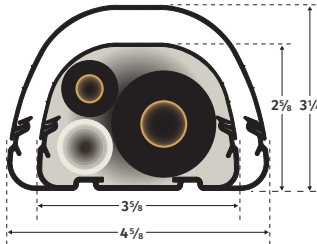


Longer 7.5ft ducting
minimizes joints and reduces waste.

Paintable.
Brush, spray or roller to match or complement custom colors. Follow paint manufacturers recommendations for vinyl products.



	MODEL	SIZE	DESCRIPTION	L	W	H	WHITE		IVORY		BROWN		GRAY	
							Order code / Ref No	Qty	Order code / Ref No	Qty	Order code / Ref No	Qty	Order code / Ref No	Qty
	LD92	3½	Ducting	90"	3⅝"	2⅝"	84004 (LD92W)	6	84024 (LD92I)	6	84064 (LD92B)	6	84044 (LD92G)	6
	LD122	4½	Ducting	90"	4⅝"	3¼"	84104 (LD122W)	6	84124 (LD122I)	6	84164 (LD122B)	6	84144 (LD122G)	6
	LJ92	3½	Coupler	2⅝"	3⅝"	2¾"	84010 (LJ92W)	6	84030 (LJ92I)	6	84270 (LJ92B)	1	84250 (LJ92G)	1
	LJ122	4½	Coupler	2⅝"	4⅞"	3½"	84110 (LJ122W)	6	84130 (LJ122I)	6	84370 (LJ122B)	1	84350 (LJ122G)	1
	LW92	3½	wall inlet	9"	4⅜"	3⅝"	84016 (LW92W)	6	84036 (LW92I)	6	84276 (LW92B)	1	84256 (LW92G)	1
	LW122	4½	wall inlet	9¾"	5⅝"	4"	84116 (LW122W)	6	84136 (LW122I)	6	84376 (LW122B)	1	84356 (LW122G)	1
	LEN92	3½	End Fitting	4¼"	3⅝"	2¾"	84007 (LEN92W)	6	84027 (LEN92I)	6	84267 (LEN92B)	1	84247 (LEN92G)	1
	LEN122	4½	End Fitting	4¼"	4⅞"	3½"	84107 (LEN122W)	6	84127 (LEN122I)	6	84367 (LEN122B)	1	84347 (LEN122G)	1
	LK92	3½	90° Flat Ell	5¾"	5¾"	2¾"	84011 (LK92W)	6	84031 (LK92I)	6	84271 (LK92B)	1	84251 (LK92G)	1
	LK122	4½	90° Flat Ell	6¼"	6½"	3½"	84111 (LK122W))	6	84131 (LK122I)	6	84371 (LK122B)	1	84351 (LK122G)	1
Above fittings also available in LDK Kit pack (shown right)														
	LP92	3½	soffit inlet	3½"	6"	4⅞"	84014 (LP92W)	6	84034 (LP92I)	6	84274 (LP92B)	1	84254 (LP92G)	1
	LP122	4½	soffit inlet	3½"	7"	5½"	84114 (LP122W)	6	84134 (LP122I)	6	84374 (LP122B)	1	84354 (LP122G)	1
	LKF92	3½	45° Flat Ell	4⅞"	4⅞"	2¾"	84012 (LKF92W)	6	84032 (LKF92I)	6	84272 (LKF92B)	1	84252 (LKF92G)	1
	LKF122	4½	45° Flat Ell	6½"	6½"	3½"	84112 (LKF122W)	6	84132 (LKF122I)	6	84372 (LKF122B)	1	84352 (LKF122G)	1
	LCI92	3½	90° Inside Vertical Ell	5¼"	5¼"	2¾"	84002 (LCI92W)	6	84022 (LCI92I)	6	84262 (LCI92B)	1	84242 (LCI92G)	1
	LCI122	4½	90° Inside Vertical Ell	5¼"	5¼"	3½"	84102 (LCI122W)	6	84122 (LCI122I)	6	84362 (LCI122B)	1	84342 (LCI122G)	1
	LCO92	3½	90° Outside Vertical Ell	4½"	4½"	2¾"	84003 (LCO92W)	6	84023 (LCO92I)	6	84263 (LCO92B)	1	84243 (LCO92G)	1
	LCO122	4½	90° Outside Vertical Ell	5¼"	5¼"	3½"	84103 (LCO122W)	6	84123 (LCO122I)	6	84363 (LCO122B)	1	84343 (LCO122G)	1
	LCFI92	3½	45° Inside Vertical Ell	4¾"	3⅝"	2¾"	84000 (LCFI92W)	6	84020 (LCFI92I)	6	84260 (LCFI92B)	1	84240 (LCFI92G)	1
	LCFI122	4½	45° Inside Vertical Ell	6¼"	4⅞"	3½"	84100 (LCFI122W)	6	84120 (LCFI122I)	6	84360 (LCFI122B)	1	84340 (LCFI122G)	1
	LCFO92	3½	45° Outside Vertical Ell	4⅝"	3⅝"	2¾"	84001 (LCFO92W)	6	84021 (LCFO92I)	6	84261 (LCFO92B)	1	84241 (LCFO92G)	1
	LCFO122	4½	45° Outside Vertical Ell	5¼"	4⅞"	3½"	84101 (LCFO122W)	6	84121 (LCFO122I)	6	84361 (LCFO122B)	1	84341 (LCFO122G)	1
	LT92	3½	Tee	7¾"	5¾"	2¾"	84015 (LT92W)	6	84035 (LT92I)	6	84275 (LT92B)	1	84255 (LT92G)	1
	LT122	4½	Tee	7¾"	6½"	3½"	84115 (LT122W)	6	84135 (LT122I)	6	84375 (LT122B)	1	84355 (LT122G)	1
	LDR12292	3½ – 4½	Reducer	3"	4⅞"	3⅞"	84106 (LDR12292W)	6	84126 (LDR12292I)	6	84366 (LDR12292B)	1	84346 (LDR12292G)	1
	LKS92	3½	90° Sweep Ell	13"	13"	2¾"	84013 (LKS92W)	6	84033 (LKS92I)	6	84273 (LKS92B)	1	84253 (LKS92G)	1
	LKS122	4½	90° Sweep Ell	14"	14"	3½"	84113 (LKS122W)	6	84133 (LKS122I)	6	84373 (LKS122B)	1	84353 (LKS122G)	1
	LF92	3½	Flexible Ell	40"	3½"	2½"	84008 (LF92W)	6	84028 (LF92I)	6	84268 (LF92B)	1	84248 (LF92G)	1
	LF122	4½	Flexible Ell	40"	4½"	3¼"	84108 (LF122W)	6	84128 (LF122I)	6	84368 (LF122B)	1	84348 (LF122G)	1
	LFJ92	3½	Flexible Adaptor	3⅝"	3⅝"	2¾"	84009 (LFJ92W)	6	84029 (LFJ92I)	6	84269 (LFJ92B)	1	84249 (LFJ92G)	1
	LFJ122	4½	Flexible Adaptor	3⅝"	4⅞"	3½"	84109 (LFJ122W)	6	84129 (LFJ122I)	6	84369 (LFJ122B)	1	84349 (LFJ122G)	1
	LWF92	3½	Wall Flange	5"	6"	2⅝"	84017 (LWF92W)	6	84037 (LWF92I)	6	84277 (LWF92B)	1	84257 (LWF92G)	1
	LWF122	4½	Wall Flange	6½"	7¾"	2⅝"	84117 (LWF122W)	6	84137 (LWF122I)	6	84377 (LWF122B)	1	84357 (LWF122G)	1
	LDC	-	Twistlock Lineset Duct Clip	-	-	-	84099 (LDC) (12 pk 50 bags)							
	LKA92	3½	45-90° Adj Flat Ell	10"	8"	5"	84046 (LKA92W)	6	84047 (LKA92I)	6	84278 (LKA92B)	1	84258 (LKA92G)	1
	LKA122	4½	45-90° Adj Flat Ell	10"	10"	5"	84146 (LKA122W)	6	84147 (LKA122I)	6	84378 (LKA122B)	1	84358 (LKA122G)	1
	LCA92	3½	45-90° Adj Vert Ell	4"	6"	5"	84048 (LCA92W)	6	84049 (LCA92I)	6	84279 (LCA92B)	1	84259 (LCA92G)	1
	LCA122	4½	45-90° Adj Vert Ell	5"	7"	8"	84148 (LCA122W)	6	84149 (LCA122I)	6	84379 (LCA122B)	1	84359 (LCA122G)	1
	LG	-	Gusset (12 per bag)	-	-	-	84098	25	-	-	-	-	-	-



Technical Information

Weather resistant PVC,
UV stabilized & fire resistant.
Tested to over 2,000 hours.

Temperature Range
-4° F to 140° F



12' Wall Duct Kit

Kit includes 12' of duct and all
essential fittings to hide and
protect the lineset for a typical
A/C installation. Available in
white, ivory

LDK Kit includes:

- LD – Ducting 4' Long (3)
- LJ – Couplers (2)
- LW – Wall Inlet (1)
- LEN – End Fitting (1)
- LK – 90° Flat Ell (1)

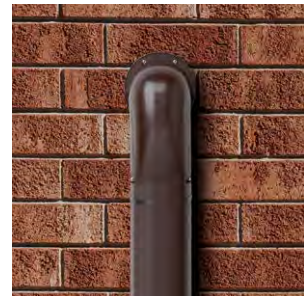
Fortress Kits:

- 84005 LDK92W – White 3½
- 84105 LDK122W – White 4½
- 84025 LDK92I – Ivory 3½
- 84125 LDK122I – Ivory 4½

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Professional quality. Quick assembly. Professional appearance.



A CSW Industrials Company

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Jarvis Application for Certificate

1 message

Talia Fox <tfox@town.arlington.ma.us>

Tue, Dec 19, 2023 at 4:09 PM

To: Carol Greeley <carol.greeley@gmail.com>, AHDC Chair <ahdcchair@town.arlington.ma.us>

Cc: Stephen Makowka <joliesteve@gmail.com>, Robert Behrent <rbehrent@town.arlington.ma.us>, John Murin <JMurin@comelectrical.com>, Joe Duquette <joeduquette@comelectrical.com>, Mike Sciaraffa <msciara@comelectrical.com>

Hello!

Please find attached the application for certificate for HVAC upgrades at the Jarvis House (funded by CPA and Green Communities). Rob Behrent, Director of Facilities has signed the application on behalf of the Town (as the Owner).

Per direction of the Chair, we have only completed page 1 so far. We will work with the contractor (Commonwealth Electrical Technologies) to provide the required supporting documentation in accordance with page 3 of the application, at least two weeks prior to the Commission's upcoming meeting on January 25. I will be in touch as learn more from Green Communities regarding their deadline for project completion.

Please confirm receipt. Thank you for your consideration.

Best,

Talia

Talia Fox | AICP, ENV SP | she/her

Sustainability Manager

Department of Planning and Community Development

Town of Arlington

781-316-3428

tfox@town.arlington.ma.us

Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.



Jarvis House Certificate Application Supplementary Materials

Talia Fox <tfox@town.arlington.ma.us>

Wed, Jan 17, 2024 at 3:52 PM

To: Stephen Makowka <joliesteve@gmail.com>, AHDC Chair <ahdcchair@town.arlington.ma.us>, AHDC <AHDC@town.arlington.ma.us>

Cc: Mike Sciaraffa <msciara@comelectrical.com>, Joe Duquette <joeduquette@comelectrical.com>, John Murin <JMurin@comelectrical.com>, Robert Behrent <rbehrent@town.arlington.ma.us>

Hi Steve, Carol,

Please see the attached supplementary materials and page 3 of the Certificate application for the Jarvis House.

Steve, I did my best to address as many of the items we discussed on the phone as possible. That said, we have not yet been able to obtain additional marked up photographs from the heat pump subcontractor denoting the exact proposed locations of the line sets, though I am hoping that what's described in the narrative will be sufficient in the meantime. I can send those annotated photographs as soon as I have them. At the very least we can include photos in the presentation we provide next week.

If you foresee major issues with this approach, please let me (and the contractors copied) know!

Thank you.

Best,

Talia

Talia Fox | AICP, ENV SP | she/her

Sustainability Manager

Department of Planning and Community Development

Town of Arlington

781-316-3428

tfox@town.arlington.ma.us

Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

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3 attachments



JarvisParcel.PNG
623K



AHDC Application_JarvisDec2023_SignedP3.pdf
265K



Jarvis House - Historic Districts Commission Certificate Application Supplementary Materials.pdf
15205K